



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/403,608	11/15/2002	Brandon Yip	025265-155	7494
21839	7590	11/07/2003		
BURNS DOANE SWECKER & MATHIS L L P				
POST OFFICE BOX 1404				
ALEXANDRIA, VA 22313-1404				

EXAMINER
RAIZEN, DEBORAH A

ART UNIT	PAPER NUMBER
2873	

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/403,608

Applicant(s)

YIP ET AL.

Examiner

Deborah A. Raizen

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 October 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 45-91 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 45-50, 52, 53, 55, 56, 58-80 and 82-91 is/are rejected.
- 7) ☒ Claim(s) 51, 54, 57 and 81 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 October 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on applications filed in Australia on October 21, 1997 and on March 4, 1999. It is noted, however, that applicant has not filed a certified copy of the second Australian application, PP8997, filed in 1999, as required by 35 U.S.C. 119(b).

### ***Drawings***

2. A new corrected drawing for Figure 4 is required in this application because Figure 4 has dark shading. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Specification***

3. The incorporation of essential material in the specification by reference to a foreign application or patent (for example, on page 11), or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

4. The attempt to incorporate subject matter into this application by reference to International Patent Applications PCT/AU97/00188 and PCT/AU96/00805 is improper, even if these are considered U.S. patent applications, because essential material may not be incorporated by reference to a U.S. patent application which itself incorporates essential material by reference (see MPEP 608.01(p)).

5. The disclosure is objected to because of the following informalities:

On page 9, line 24, US Patent 4,954,591 is erroneously labeled "to the Applicants".

On page 10, line 9, and page 13, line 28, the description of the international patent applications as "to Applicants" is incorrect because the U.S. Applicants are the inventors.

Appropriate correction is required.

6. The use of the trademark CR-39 has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner that might adversely affect their validity as trademarks.

#### ***Claim Objections***

7. Claim 83 objected to because of the following informalities: "and" should precede "depositing" in line 14 or 15. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 46, 49, 50, 60, 68, 75, and 84 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, Markush claims must be provided with support in the disclosure for each member of the Markush group (MPEP 608.01(p)). With regard to claim 49-51, zirconium metal is not disclosed or claimed as a layer in the light-absorbing coating in the parent international application, nor is it disclosed in the current specification. With regard to the other claims, many species of dielectric material and metallic material are not disclosed or claimed in the parent international application, nor are they disclosed in the current specification.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 46, 60, 68, 75, and 84 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The substances  $\text{Si}_3\text{N}_4$  and  $\text{AlN}$  are listed as dielectric materials and are also included in the metallic materials because they are metal nitrides of silicon and aluminum. If these substances are always electrically conductive, they should not be

Art Unit: 2873

included as possible dielectric materials, and if they are never electrically conductive, they should not be included as possible metallic materials. Also, if any other metal nitrides are never electrically conductive, they should not be included as possible metallic materials.

12. Claims 69-72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Claims 69-72 recite the limitations "a front lens wafer" or "a back lens wafer". There is insufficient antecedent basis for these limitations in the claims because only one wafer is recited. Although applicants' usage of the term "lens wafer" in the specification and the claims suggests a narrow definition that might provide antecedent basis, the term is often used more broadly in the art, and no narrow definition is explicitly provided in the specification. If applicants wish to amend the specification to include such a definition, the definition will not be considered new matter. Alternatively, antecedent basis may be provided in the claims.

14. Claims 69-72 recite the limitation "the concave surface" or "the convex surface". There is insufficient antecedent basis for these limitations in the claims. Although applicants' usage of the term "lens wafer" in the specification and the claims suggests a narrow definition that might provide antecedent basis, the term is often used more broadly in the art, and no narrow definition is explicitly provided in the specification. If applicants wish to amend the specification to include such a definition, the definition will not be considered new matter. Alternatively, antecedent basis may be provided in the claims.

Art Unit: 2873

15. Claims 69-72 and 87-91 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

16. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “lens element” in claims 69-72 and 87-91 is used by the claims to mean “lens component”, while the accepted meaning is “a single mass of refractive material.” The term is indefinite because the specification does not clearly redefine the term.

***Claim Rejections - 35 USC § 102***

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. Claims 45-50, 52, 53, 55, 58-62, 64, 67-70, 74, 75, 83, 84, and 87-89 are rejected under 35 U.S.C. 102(b) as being anticipated by Jacobsson (4,169,655).

In regard to claim 45, Jacobsson discloses an optical lens (Fig. 17 and Fig. 1) including a lens element (part 6 or 8 of Fig. 17, col. 9, lines 63-68); and

Art Unit: 2873

an asymmetric reflectance (spectrally selective portion 3 is reflective toward one side and portion 4 is anti-reflective toward the other side, col. 3, line 66 to col. 4, line 3; although portion 2 makes the overall reflectance symmetric, the limitation is met when portion 2 is not labeled here as part of the coating; alternatively, portions 2 and 3 are the coating and portion 4 is not part of the coating), light-absorbing (col. 4, line 1; also, chromium in portion 4 is light absorbing, col. 6, lines 25-26, which apply to Example 4 also, and the table for Example 4) coating (portions, or parts, 3 and 4 of Example 4, table in col. 6, of the filter 7 in Fig. 17, col. 9, lines 66-67; alternatively, when substrate portion 1 is part 8 of Fig. 17 or still part 6, portions 2 and 3 of the filter 7 in Fig. 17 form the asymmetric reflectance, light-absorbing coating) including at least four (lines 8-18 or 8-19 in the table in col. 6; alternatively, lines 13-19, which make up portion 4) overlapping light absorbing (Cr) and generally transparent layers ( $\text{Al}_2\text{O}_3$ , alumina), and wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect on the eye side of the optical lens (portion 4 is designed to have an anti-reflective effect, col. 3, line 66 to col. 4, line 3 and col. 4, lines 35 to col. 5, line 8) and a desired color on the other side of the optical lens (portion 3 as disclosed in the table in col. 6 is designed to transmit the particular band shown in Fig. 9; portions 2 and 4 as disclosed in the table are designed not to interfere with the spectral characteristics of portion 3; the resulting reflectance spectrum of the coating portions 3 and 4, together with portion 2, shown in Fig. 8, has visible color in ordinary light because of the minima at 589 nm and at  $20,500\text{ cm}^{-1}$  and  $23,000\text{ cm}^{-1}$  and the reflectance of almost 3% of incident light in the band  $18000\text{--}22000\text{ cm}^{-1}$ , which is the small reflectance seen by a person external to the device, col. 4, lines 39-40; also, in the absence of portion 2, which is not labeled here as part of the coating and which is unnecessary if no protection of people external to



Art Unit: 2873

the wearer is desired, the reflectance directly off portion 3 is much higher, and its color is still determined by the designed spectrum of portion 3; alternatively, when substrate portion 1 is part 8, or still part 6, of Fig. 17, portion 4 is unnecessary to a coating made up of 2 and 3, whose color is determined by 3); and

wherein the asymmetric reflectance, light absorbing coating includes alternative layers (table in col. 6) of a dielectric material ( $\text{Al}_2\text{O}_3$ ) and a metallic material (Cr, chromium) which is a metal (chromium is a metal) or metal nitride.

In regard to claim 46, in the Jacobsson optical lens, the dielectric material is  $\text{Al}_2\text{O}_3$  and the metallic material is chromium.

In regard to claim 47, in the Jacobsson optical lens, the asymmetric reflectance, light-absorbing coating further includes a compatible dielectric top layer or layers ( $\text{Al}_2\text{O}_3$ , line 19 in the table in col. 6; alternatively, the dielectric top layers are the layers of a wholly dielectric interference filter portion 3, disclosed in col. 3, lines 57-59; another alternative is that the dielectric top layers are layers 9 and 11 of part 3 in the table in col. 6; yet another alternative is that when part 8 in Fig. 17 is substrate portion 1, so that portions 2 and 3 form the coating, the dielectric top layers are layers 9 and 11 or all the layers of portion 3 when it is wholly dielectric).

In regard to claim 48, in the Jacobsson optical lens, the compatible dielectric layer or layers are of suitable material and thickness to provide a desired color to the optical lens (as part of portion 4, the layer of line 19 is designed not to change the spectral characteristics, and hence

Art Unit: 2873

the color, of the optical lens, as determined by portion 3; alternatively, when portion 3 is wholly dielectric, it is designed to be spectrally selective, and therefore to determine the reflected color, as disclosed in col. 3, lines 57-65; furthermore, it is disclosed to be of a known type of interference filters such as a Fabry-Perot filter; therefore, the material and thickness of its layers are selected for passage of a particular band, and at least partial destructive interference and substantial reflection of other colors, as explained in Baumeister et al., cited by applicants in the information disclosure statement of 14 February 2000; also, when portion 3 is not wholly dielectric, its dielectric layers 9 and 11 are still of suitable material and thickness for spectral selection, and hence color).

In regard to claim 49, Jacobsson discloses an optical lens (Fig. 17, Fig. 1, Example 3 table in col. 5-6), including a lens element (part 6 or 8 of Fig. 17, col. 9, lines 63-68); and

an asymmetric reflectance (spectrally selective portion 3 is reflective toward one side and portion 4 is anti-reflective toward the other side, col. 3, line 66 to col. 4, line 3), light-absorbing (col. 4, line 1; also, chromium in portion 4 is light absorbing, col. 6, lines 25-26) coating (portions, or parts, 3 and 4 of Example 3, table in col. 5 and top of col. 6, and of the filter 7 in Fig. 17; alternatively, portions 2 and 3 are the coating and portion 4 is not part of the coating) including at least four alternating layers of silica ( $\text{SiO}_2$ , in lines 8-17 in the table in col. 5 and top of col. 6, or alternatively, only lines 11, 13, 15, and 17 of part 4) and chromium (Cr, lines 12, 14, and 16), niobium (Nb) or zirconium (Zr) metal; and

wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect on the eye side of the optical lens (portion 4 is designed to have an anti-

Art Unit: 2873

reflective effect, col. 3, line 66 to col. 4, line 3 and col. 4, lines 35 to col. 5, line 8) and a desired color on the other side of the optical lens (portion 3 as disclosed in the table in col. 5 is designed to transmit the particular band shown in Fig. 7; portions 2 and 4 as disclosed in the table are designed not to interfere with the spectral characteristics of portion 3; the resulting reflectance spectrum of the coating portions 3 and 4, together with portion 2, shown in Fig. 6, has visible color in ordinary light because of the minimum at 589 nm, the broad minimum in the region  $20,000\text{ cm}^{-1}$  to  $23,000\text{ cm}^{-1}$ , and the reflectance of over 3% of incident light in most of the band between 550 and 700 nm, which is the small reflectance seen by a person external to the device, col. 4, lines 39-40; also, in the absence of portion 2, which is not labeled here as part of the coating and which is unnecessary if no protection of people external to the wearer is desired, the reflectance directly off portion 3 is much higher, and its color is still determined by the designed spectrum of portion 3; alternatively, when substrate portion 1 is part 8, or still part 6, of Fig. 17, portion 4 is unnecessary to a coating made up of portions 2 and 3, whose color is still determined by 3).

In regard to claim 50, in the Jacobsson optical lens, the asymmetric reflectance, light-absorbing coating includes an additional dielectric layer (magnesium fluoride,  $\text{MgF}_2$ , line 9 in the table) or layers other than silica of such a thickness to provide a desired color to the optical lens (all the layers of portion 3, including the dielectric layers, are designed to have the appropriate thickness for passage of a particular band, col. 3, lines 62-65, and, hence, a resulting reflected color in ordinary light; also, all the layers of portion 3 are disclosed to be dielectric as

Art Unit: 2873

an alternative embodiment, col. 3, lines 57-62, in which case the thickness of the layers is still suitable for providing the particular pass bands and resulting reflected color).

In regard to claim 52, in the Jacobsson optical lens, a surface of the lens is subjected to a surface treatment (col. 10, lines 39-46).

In regard to claim 53, in the Jacobsson optical lens, the surface treatment improves adhesion thereto (col. 10, line 45).

In regard to claim 55, in the Jacobsson optical lens, an adhesion promoting coating is applied to a surface (col. 10, line 45).

In regard to claim 58, in the Jacobsson optical lens, the lens element (when it includes parts 6 and 8 of Fig. 17) is a laminate optical lens (Fig. 17 and col. 9, lines 63-68).

In regard to claim 59, Jacobsson discloses a multi-coated optical lens (either part 6 or part 8 of Fig. 17 together with part 7; Fig. 1 and the table for Example 3 in 5-6) including a lens element (either part 6 or 8 of Fig. 17, col. 9, lines 63-68);

an asymmetric reflectance (spectrally selective portion 3 is reflective and portion 4 is anti-reflective, col. 3, line 66 to col. 4, line 3), light absorbing (col. 4, line 1; also, chromium in portion 4 is light absorbing, col. 6, lines 25-26) coating (portions, or parts, 3 and 4 of Example 3, table in col. 5 and top of col. 6, and of the filter 7 in Fig. 17; alternatively, when part 8, or still

Art Unit: 2873

part 6, of Fig. 17 is substrate portion 1, portions 2 and 3 are the coating) including a plurality (lines 8-17 in the table) of overlapping light absorbing (Cr, lines 12, 14, and 16) and generally transparent layers ( $\text{SiO}_2$ , in lines 8-17 in the table in col. 5 and top of col. 6, or alternatively, only lines 11, 13, 15, and 17 of part 4), and wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect on the eye side of the optical lens (portion 4 is designed to have an anti-reflective effect, col. 3, line 66 to col. 4, line 3 and col. 4, lines 35 to col. 5, line 8) and a desired color on the other side of the lens (portion 3 as disclosed in the table in col. 5 is designed to transmit the particular band shown in Fig. 7; portions 2 and 4 as disclosed in the table are designed not to interfere with the spectral characteristics of portion 3; the resulting reflectance spectrum of the coating portions 3 and 4, together with portion 2, shown in Fig. 6, has visible color in ordinary light because of the minimum at 589 nm, the broad minimum in the region  $20,000 \text{ cm}^{-1}$  to  $23,000 \text{ cm}^{-1}$ , and the reflectance of over 3% of incident light in most of the band between 550 and 700 nm, which is the small reflectance seen by a person external to the device, col. 4, lines 39-40; also, in the absence of portion 2, which is not labeled here as part of the coating and which is unnecessary if no protection of people external to the wearer is desired, the reflectance directly off portion 3 is much higher, and its color is still determined by the designed spectrum of portion 3; alternatively, when substrate portion 1 is part 8, or still part 6, of Fig. 17, portion 4 is unnecessary to a coating made up of portions 2 and 3, and the color is still determined by 3);

wherein the asymmetric reflectance, light absorbing coating includes alternating layers (table in col. 5-6) of a dielectric material ( $\text{SiO}_2$ , in lines 8-17 in the table in col. 5 and top of col. 6) and a metallic material (Cr, chromium) which is a metal or metal nitride; and

a secondary coating (portion, or part, 2; alternatively, portion 4 when the substrate is part 8, or still part 6, and portions 2 and 3 are the coating) which provides a desirable optical (anti-reflective, col. 3, line 66 to col. 4, line 3) and/or mechanical property to the optical lens.

In regard to claim 60, in the Jacobsson multi-coated optical lens, the dielectric material is  $\text{SiO}_2$ ; and the metallic material is chromium (Cr).

In regard to claim 61, in the Jacobsson multi-coated optical lens, the asymmetric reflectance, light-absorbing coating further includes a compatible dielectric top layer or layers (portion, or part, 3, when it is wholly dielectric, as disclosed in col. 3, lines 57-59; alternatively, only layer 9 of part 3 in the table col. 5).

In regard to claim 62, in the Jacobsson multi-coated optical lens, the compatible dielectric layer or layers are of suitable material and thickness to provide a desired color to the optical lens (as part of portion 4, the layer of line 19 is designed not to change the spectral characteristics, and hence the color, of the optical lens, as determined by portion 3; alternatively, when portion 3 is wholly dielectric, it is designed to be spectrally selective, and therefore to determine the reflected color, as disclosed in col. 3, lines 57-65; furthermore, it is disclosed to be of a known type of interference filters such as a Fabry-Perot filter; therefore, the material and thickness of its layers are selected for passage of a particular band, and at least partial destructive interference and substantial reflection of other colors, as explained in Baumeister et al.; also, when portion 3

is not wholly dielectric, its dielectric layers 9 and 11 are still of suitable material and thickness for spectral selection, and hence color).

In regard to claim 64, in the Jacobsson multi-coated optical lens, the secondary coating is an anti-reflective coating (col. 3, line 66 to col. 4, line 3) applied to the front surface (in the case that part 8 is substrate portion 1 and the primary coating is made up of portions 2 and 3, the secondary coating made up of portion 4 is applied to the front surface) or eye side surface (in the case that part 6 is substrate portion 1 and the primary coating is made up of portions 2 and 3, the secondary coating made up of portion 4 is applied to the eye side surface) of the optical lens.

In regard to claim 67, Jacobsson discloses an optical lens element (Fig. 17, Fig. 1, and Example 3 table in col. 5-6) including a lens wafer (part 6 or 8 of Fig. 17, col. 9, lines 63-68) having a first lens surface; and a second lens surface,

the first or second surface having deposited thereon (col. 9, lines 63-68) an asymmetric reflectance (spectrally selective portion 3 is reflective and portion 4 is anti-reflective, col. 3, line 66 to col. 4, line 3), light-absorbing (col. 4, line 1; also, chromium in portion 4 is light absorbing, col. 6, lines 25-26) coating (portions, or parts, 3 and 4 of Example 3, table in col. 5 and top of col. 6, and of filter 7 in Fig. 17; alternatively, portion 2 and 3, in which case portion 2 is anti-reflective) including at least four (lines 11-17 in the table in col. 5-6) overlapping light absorbing (Cr, lines 12, 14, and 16) and generally transparent layers ( $\text{SiO}_2$ , in lines 8-17 in the table in col. 5 and top of col. 6, or alternatively, only lines 11, 13, 15, and 17 of part 4), and wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect

Art Unit: 2873

on the eye side of the optical lens (portion 4 is designed to have an anti-reflective effect, col. 3, line 66 to col. 4, line 3 and col. 4, lines 35 to col. 5, line 8) and a desired color on the other side of the optical lens (portion 3 as disclosed in the table in col. 5 is designed to transmit the particular band shown in Fig. 7; portions 2 and 4 as disclosed in the table are designed not to interfere with the spectral characteristics of portion 3; the resulting reflectance spectrum of the coating portions 3 and 4, together with portion 2, shown in Fig. 6, has visible color in ordinary light because of the minimum at 589 nm, the broad minimum in the region  $20,000\text{ cm}^{-1}$  to  $23,000\text{ cm}^{-1}$ , and the reflectance of over 3% of incident light in most of the band between 550 and 700 nm, which is the small reflectance seen by a person external to the device, col. 4, lines 39-40; also, in the absence of portion 2, which is not labeled here as part of the coating and which is unnecessary if no protection of people external to the wearer is desired, the reflectance directly off portion 3 is much higher, and its color is still determined by the designed spectrum of portion 3) when formed as a laminate optical lens (as explained, even with portion 2, the reflectance spectrum in Fig. 6 shows that the laminate optical lens has some color, determined mainly by the design of portion 3; also, this is an intended use, which does not add a structural limitation); and wherein the asymmetric reflectance, light absorbing coating includes alternating layers (table in col. 5) of a dielectric material ( $\text{SiO}_2$ ) and a metallic material (Cr, chromium) which is a metal or metal nitride.

In regard to claim 68, in the Jacobsson optical lens element, the dielectric material is ( $\text{SiO}_2$ ); and the metallic material is (Cr, chromium).



In regard to claim 69, as understood, in the Jacobsson optical lens element, the lens wafer (part 6) is a front lens wafer (Fig. 17) and the asymmetric reflectance light absorbing coating (portions 2 and 3 or 3 and 4 of part 7) is deposited on the concave contact surface of the front lens wafer (Fig. 17).

In regard to claim 70, as understood, in the Jacobsson optical lens element, the lens wafer (part 8) is a back lens wafer and the asymmetric reflectance light absorbing coating (portions of part 7) is deposited on the convex contact surface of the back lens wafer (Fig. 17).

In regard to claim 74, Jacobsson discloses a laminate optical lens (Fig. 17, Fig. 1, and Example 3, col. 5-6) including a front lens wafer (part 6 in Fig. 17, col. 9, lines 63-68) including a contact surface (its right side); a complementary back lens wafer (part 8) including a contact surface (its left side); and

an asymmetric reflectance (spectrally selective portion 3 is reflective toward one side and portion 4 is anti-reflective toward the other side, col. 3, line 66 to col. 4, line 3; alternatively, the coating is formed of portions 2 and 3, in which case portion 2 is anti-reflective toward the other side), light absorbing (col. 4, line 1; also, chromium in portion 4 is light absorbing, col. 6, lines 25-26) coating (portions, or parts, 3 and 4 of Example 3, table in col. 5 and top of col. 6; alternatively, portions 2 and 3) deposited on a contact surface (Fig. 17), which light absorbing coating includes at least four (lines 11-17 in the table in col. 5) overlapping light absorbing (Cr, lines 12, 14, and 16) and generally transparent layers ( $\text{SiO}_2$ , lines 11, 13, 15, and 17 of part 4), and wherein the thickness and/or number of the respective layers are selected to provide an anti-

Art Unit: 2873

reflective effect on the eye side (portion 4 is designed to have an anti-reflective effect, col. 3, line 66 to col. 4, line 3 and col. 4, lines 35 to col. 5, line 8) of the optical lens and a desired color on the other side of the optical lens (portion 3 as disclosed in the table in col. 5 is designed to transmit the particular band shown in Fig. 7; portions 2 and 4 as disclosed in the table are designed not to interfere with the spectral characteristics of portion 3; the resulting reflectance spectrum of the coating portions 3 and 4, together with portion 2, shown in Fig. 6, has visible color in ordinary light because of the minimum at 589 nm, the broad minimum in the region  $20,000\text{ cm}^{-1}$  to  $23,000\text{ cm}^{-1}$ , and the reflectance of over 3% of incident light in most of the band between 550 and 700 nm, which is the small reflectance seen by a person external to the device, col. 4, lines 39-40; also, in the absence of portion 2, which is not labeled here as part of the coating and which is unnecessary if no protection of people external to the wearer is desired, the reflectance directly off portion 3 is much higher, and its color is still determined by the designed spectrum of portion 3; alternatively, when substrate portion 1 is part 8, or still part 6, of Fig. 17, portion 4 is unnecessary to a coating made up of portions 2 and 3, and the color is still determined by 3); and

wherein the asymmetric reflectance, light absorbing coating includes alternating layers (table in col. 5) of a dielectric material ( $\text{SiO}_2$ ) and a metallic material (Cr, chromium) which is a metal or metal nitride.

In regard to claim 75, in the Jacobsson laminate optical lens, the dielectric material is  $\text{SiO}_2$ ; and the metallic material is chromium (Cr).

In regard to claim 83, Jacobsson discloses a method for preparing an optical lens (Fig. 17, Fig. 1, and Example 3, col. 5-6), including a lens element (part 6 in Fig. 17, corresponding to glass plate 1 in Fig. 1); and an asymmetric reflectance (spectrally selective portion 3 is reflective toward one side and portion 4 is anti-reflective toward the other side, col. 3, line 66 to col. 4, line 3; alternatively, the coating is formed of portions 2 and 3, in which case portion 2 is anti-reflective toward the other side), light absorbing (col. 4, line 1; also, chromium in portion 4 is light absorbing, col. 6, lines 25-26) coating (portions, or parts, 3 and 4 of Example 3, table in col. 5 and top of col. 6, and of filter 7 in Fig. 17) including at least four (lines 11-17 in the table in col. 5) overlapping light absorbing (col. 4, line 1; also, chromium in portion 4 is light absorbing, col. 6, lines 25-26) and generally transparent layers ( $\text{SiO}_2$ , lines 11, 13, 15, and 17 of part 4), and wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect on the eye side of the optical lens (portion 4 is designed to have an anti-reflective effect, col. 3, line 66 to col. 4, line 3 and col. 4, lines 35 to col. 5, line 8) and a desired color on the other side of the optical lens (portion 3 as disclosed in the table in col. 5 is designed to transmit the particular band shown in Fig. 7; portions 2 and 4 as disclosed in the table are designed not to interfere with the spectral characteristics of portion 3; the resulting reflectance spectrum of the coating portions 3 and 4, together with portion 2, shown in Fig. 6, has visible color in ordinary light because of the minimum at 589 nm, the broad minimum in the region  $20,000\text{ cm}^{-1}$  to  $23,000\text{ cm}^{-1}$ , and the reflectance of over 3% of incident light in most of the band between 550 and 700 nm, which is the small reflectance seen by a person external to the device, col. 4, lines 39-40; also, in the absence of portion 2, which is not labeled here as part of the coating and which is unnecessary if no protection of people external to the wearer is desired, the

Art Unit: 2873

reflectance directly off portion 3 is much higher, and its color is still determined by the designed spectrum of portion 3; alternatively, when substrate portion 1 is part 8, or still part 6, of Fig. 17, portion 4 is unnecessary to a coating made up of portions 2 and 3, and the color is still determined by 3); and wherein the asymmetric reflectance, light absorbing coating includes alternating layers (table in col. 5) of a dielectric material ( $\text{SiO}_2$ ) and a metallic material (Cr, chromium) which is a metal or metal nitride;

which method includes

providing

a lens element (plate of glass 1, col. 10, lines 41-42),

a dielectric material or materials (col. 10, lines 39-43: evaporation processes of known type include providing a dielectric material for depositing a dielectric layer, as explained in Baumeister, page 62; even if a metal oxide is formed by depositing metal in an oxygen environment, the oxygen, which is a dielectric material, is provided); and

a metallic material or materials (col. 10, lines 39-43: evaporation processes of known type include providing a metallic material for depositing a metallic layer as explained, for example, in Farges (4,045,125), col. 6, cited here only to show inherency); and

depositing at least four overlapping layers of dielectric material and metallic material on a surface of the optical lens element (col. 10, lines 39-43 and the table in col. 5-6), the number and/or thickness of the respective layers being selected to provide an asymmetric reflectance, light-absorbing coating (spectrally selective portion 3 is designed to be reflective, and portion 4 is designed to be anti-reflective and light absorbing for light reflected off one side of portion 3,

Art Unit: 2873

col. 3, line 66 to col. 4, line 3, so that the coating made up of portions 3 and 4 is an asymmetric reflectance coating; alternatively, portions 2 and 3 make up the coating, in which case portion 2 is the anti-reflective portion).

In regard to claim 84, in the Jacobsson method, the dielectric material is  $\text{SiO}_2$ ; and the metallic material is chromium (Cr; table for Example 3 in col. 5-6).

In regard to claim 87, as understood, in the Jacobsson method, the lens element includes a front lens wafer (part 6 in Fig. 17) including a contact surface (right surface), a complementary back lens wafer (part 8 in Fig. 17), including a contact surface (left surface), and the overlapping layers of dielectric material and metallic material are deposited on a surface of the front and/or complementary back lens wafer (Fig. 17 and col. 10, lines 40-43; col. 9, lines 63-64 and 67-68 and col. 10, lines 19-23 and lines 28-32 disclose that either part 6 or part 8 or both can be the substrate, plate of glass 1).

In regard to claim 88, as understood, in the Jacobsson method, the overlapping layers of dielectric material and metallic material (part 7 in Fig. 17) are deposited on a contact surface of the front (part 7 is on the right surface of part 6) or complementary back lens wafer (part 7 is on the left surface of part 8).

In regard to claim 89, as understood, in the Jacobsson method, a laminate adhesive is applied to one or both contact surfaces (col. 10, lines 43-46), the front lens wafer and back lens

wafer being brought into contact (col. 10, line 43-46 and Fig. 17) and the laminate so formed being subjected to a curing step (inherent in the process of using optical cement because a step, such as drying, heating, UV light exposure, or time for a chemical reaction to run to completion, is necessary to form the permanent bond out of substances that are not initially bonded) to form a laminate optical lens (Fig. 17).

***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 56, 73, 76-80, 85, 90, and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobsson in view of Tovi (4,934,792).

In regard to claim 56, Jacobsson discloses an optical lens according to claim 45, as explained above, but does not disclose that a surface of the lens element bears a mark. Tovi discloses an optical lens (Fig. 4B) that includes a lens element (anterior, or front, plate 6 in Fig. 4), wherein a surface of the lens element bears a mark (Figs. 1 and 4 and col. 4, lines 52-60) the mark being visible from the front surface of the optical lens (col. 3, lines 10-12 and col. 5, lines 66-68), but not being visible from the eye side thereof (col. 3, lines 39-42; col. 6, lines 10-20). Furthermore, Tovi teaches that such a mark has a decorative purpose (Fig. 1 and col. 2, line 25) and has the advantage that it does not interfere with the vision of the wearer (col. 2, line 28-29) and does not distort the image of objects seen through the lens (col. 3, lines 40-42). Therefore, it

Art Unit: 2873

would have been obvious to one of ordinary skill in the art to provide a mark that is visible from the front on a surface of the lens element in the Jacobsson optical lens, as disclosed in Tovi, because such a mark would have a decorative purpose, as taught by Tovi. Furthermore, it would be obvious to one of ordinary skill in the art to make the mark not visible from the eye side, as disclosed in Tovi, because it would then not distort the wearer's vision, as taught by Tovi.

In regard to claim 73, Jacobsson discloses an optical lens element according to claim 67 as explained above. However, Jacobsson does not disclose that a surface of the lens wafer includes a roughened area on the surface to form a mark and that the asymmetric reflectance light absorbing coating is deposited on the roughened surface. Tovi discloses optical lens element that includes a lens wafer (anterior, or front, plate 6 in Fig. 4B). Tovi further discloses that a surface of the lens wafer includes a roughened area on the surface to form a mark (Figs. 1 and 4B) and that a partially reflecting coating is deposited on the roughened surface (col. 2, lines 53-66). Furthermore, Tovi teaches that forming a mark as a roughened area on the surface of a lens wafer and depositing a partially reflecting coating on the roughened surface allows the creation of a mark for decorative purposes (Fig. 1 and col. 1, line 25) that is only visible to an outside observer (col. 2, lines 49-66 and col. 6, lines 10-20) and does not distort the vision of the wearer (col. 1, lines 41-46). Although the coating disclosed by Jacobsson has other features, it is partially reflecting, as shown by its reflectance spectrum. Therefore, it would have been obvious to one of ordinary skill in the art to form a mark as a roughened area on a surface of the lens wafer in the Jacobsson optical lens element, as disclosed in Tovi, and to deposit the Jacobsson coating on the roughened surface because such a mark would be desirable for decorative

Art Unit: 2873

purposes and would only be visible to an outside observer and does not distort the vision of the wearer, as taught by Tovi.

In regard to claim 76, Jacobsson discloses a laminate optical lens according to claim 74, as explained above, but does not disclose that a contact surface of the front and/or back lens wafer bears a visible mark thereon. Tovi discloses an optical lens (Fig. 4B) that includes a lens element (anterior, or front, plate 6 in Fig. 4), wherein a contact surface of the front (front only in the embodiment of Fig. 4B) and/or back lens wafer bears a visible mark (Figs. 1 and 4 and col. 4, lines 52-60 and col. 5, lines 6-26), the mark being rendered substantially invisible from the eye side of the laminate lens when the lens wafer is bonded to its complementary wafer with a laminate adhesive (col. 3, lines 15-30 and 39-45; col. 6, lines 10-20) having a refractive index approximately equal to that of the optical lens (col. 5, lines 30-50). Furthermore, Tovi teaches that such a mark serves a decorative purpose when it is visible to an observer from the front, as explained above for claim 56. Also, Tovi teaches that making the mark invisible from the eye side prevents distortion of images of objects viewed through the lens, as explained above. To achieve these features, Tovi teaches that it is simplest and least expensive to form the mark on the surface of one lens wafer and to bond the lens wafer to its complementary wafer with an adhesive (col. 5, lines 20-33). Tovi also teaches that a matching refractive index of the adhesive is then required in order to minimize distortion even when the adhesive layer is thick (col. 5, lines 30-51). Therefore, it would have been obvious to one of ordinary skill in the art to make a visible mark on a contact surface of a front lens wafer, as disclosed in Tovi, in the Jacobsson laminate optical lens because such a mark serves a decorative purpose to an observer, as taught



by Tovi. It would have further been obvious to one of ordinary skill in the art to bond the lens wafer to its complimentary wafer with a refractive index matched adhesive, as disclosed in Tovi, because it would be the simplest and least expensive way of achieving the feature of a mark that it is not visible to the wearer and that does not distort the vision of the wearer, as taught by Tovi.

In regard to claim 77, Tovi discloses that the mark is visible from the front surface of the laminate lens. Furthermore, Tovi teaches that making the mark visible from the front surface of the laminate lens serves a decorative purpose (Fig. 1 and col. 1, lines 25-26). Therefore, it would have been obvious to one of ordinary skill of the art to make the mark in the Jacobsson in view of Tovi laminate optical lens visible from the front because it would serve a decorative purpose, as taught by Tovi.

In regard to claim 78, see the rejection of base claim 76 above and the rejection of claim 73 above.

In regard to claim 79, in the Jacobsson laminate optical lens, the asymmetric reflectance light absorbing coating includes a silica top layer (layer 17 in the table at the top of col. 6). However, Jacobsson does not disclose that the silica top layer bears a mark visible prior to lamination of the wafers. Tovi discloses a laminate optical lens that bears a mark that is visible prior to lamination of the wafers (Figs. 1 and 4 and col. 4, lines 52-60 and col. 5, lines 6-26). Tovi further discloses that such a mark can be etched into the silica (glass plate) of the lens wafers (plates, col. 6, line 24-25). Furthermore, Tovi teaches that etching the mark in silica is a

Art Unit: 2873

useful method for producing the three-dimensional shape necessary for meeting the features of visibility to observers and invisibility to the wearer after lamination (col. 6, lines 10-20 and 24-27). Also, after the Jacobsson lens wafer is coated, any mark made on it would have to be made on the coating. Therefore, it would have been obvious to one of ordinary skill in the to make the silica top layer of the coating in the Jacobsson laminate optical lens bear a mark that is visible before lamination, as disclosed in Tovi, because such a mark, etched in silica, would meet the desirable features for the mark after lamination, as taught by Tovi, and because the mark would have to be made in the silica top layer of the coating after the Jacobsson lens wafer is coated.

In regard to claim 80, Tovi discloses that the visible mark is etched into silica (col. 6, lines 24-27). Furthermore, Tovi teaches that etching the mark into silica is a useful method of producing the three-dimensional shape necessary for meeting the features of visibility to observers and invisibility to the wearer after lamination (col. 6, lines 10-20 and 24-27). Also, after the Jacobsson lens wafer is coated, any mark etched on it would have to be etched on the coating, into its silica top layer. Therefore, it would have been obvious to one of ordinary skill in the to etch the visible mark into the silica top layer of the coating in the Jacobsson laminate optical lens because this would be a useful method of producing the three-dimensional shape necessary for meeting the features of visibility to observers and invisibility to the wearer after lamination, as taught by Tovi, and because the mark would have to be etched into the silica top layer of the coating when the lens wafer is coated.

In regard to claim 85, see the rejection of base claim 83 above and the rejection of claim 73 above.

In regard to claim 90, as understood, Jacobsson discloses method according to claim 89, as explained above. However, Jacobsson does not disclose that the contact surface bearing the light-absorbing coating bears a visible mark such that, when the laminate is bonded, the mark on the contact surface becomes substantially invisible to the wearer. Tovi discloses a method for preparing an optical lens that includes depositing a partially reflecting, light-absorbing coating on the contact surface of a lens wafer that bears a visible mark such that, when the laminate is bonded, the mark on the contact surface becomes substantially invisible to the wearer (col. 2, lines 49-53 and col. 6, lines 10-20). Furthermore, Tovi teaches that this method has the advantage of creating a mark for decorative purposes that does not distort the vision of the wearer (Fig. 1 and col. 3, lines 40-42). Also, the Jacobsson coating is partially reflecting and could therefore be interchanged with the Tovi coating. Therefore, it would have obvious to one of ordinary skill in the art to include in the Jacobsson method a visible mark on the contact surface that bears the light-absorbing coating such that, when the laminate is bonded, the mark on the contact surface becomes substantially invisible to the wearer, as disclosed in Tovi, because such a mark would have decorative purposes and would not distort the vision of the wearer, as taught by Tovi.

In regard to claim 91, as understood, see the rejection of base claim 89 above and the rejections of claims 76, 79 and 90, above (also, the refractive index of the laminate adhesive

Art Unit: 2873

would have to match the silica layer because that is the layer with which it comes in contact after the lens wafer is coated).

21. Claims 63 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobsson in view of Farges (4,045,125).

In regard to claim 63, Jacobsson discloses a multi-coated lens according to claim 59 but does not disclose that the secondary coating is an abrasion-resistant or hydrophobic coating applied to the front surface or eye side surface of the optical lens. Farges discloses a multi-coated lens that includes a secondary coating that is abrasion-resistant (layer 43 in Figs. 4 and 5). Furthermore, Farges discloses that such a coating is necessary to protect fragile multi-layered coatings (col. 5, lines 41-58). The Jacobsson coating is fragile before the two lens wafers are laminated together. Therefore, it would have been obvious to one of ordinary skill in the art to include an abrasion resistant secondary coating on the Jacobsson lens element because such a coating would protect the asymmetric reflectance, light absorbing coating, as taught by Farges.

In regard to claim 65, Jacobsson discloses a multi-coated optical lens according to claim 64, but does not disclose that it further includes an abrasion-resistant coating supporting the anti-reflective coating. Farges discloses an abrasion-resistant coating (43 in Fig. 4) supporting an anti-reflective coating (32-33). Furthermore, Farges teaches that the abrasion-resistant coating protects the anti-reflective coating. Therefore, it would have been obvious to one of ordinary

Art Unit: 2873

skill in the art to further include an abrasion-resistant coating supporting the anti-reflective coating in the Jacobsson lens because such a coating would protect the anti-reflective coating.

Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobsson in view of Farges and further in view of Ko et al. (5846650). Jacobsson discloses a multi-coated optical lens that makes claim 65 unpatentable in view of Farges, but neither discloses that the abrasion-resistant coating includes an organo-silicone resin. Ko discloses coating optical article with an abrasion resistant coating that includes an organic silicon compound (an organo silicone resin; col. 2, lines 14-18). Ko further teaches that such a coating has good abrasion-resistance and anti-fogging properties (col. 2, lines 14-18). Farges discloses that any such material can be used. Therefore, it would have been obvious to one of ordinary skill in the art to include organo-silicone resin in the abrasion-resistant coating in the Jacobsson in view of Farges lens because it has good abrasion-resistance and anti-fogging properties, as taught by Ko.

22. Claim 82 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobsson in view of Ace (4,679,918). Jacobsson discloses a laminate optical lens according to claim 74, as explained above, but does not disclose that the laminated optical lens is of the semi-finished type. Ace discloses making laminated optical lenses of the semi-finished type and then polishing them to the correct prescription (col. 4, lines 38-41). Such a semi-finished lens blank is commercially advantageous because it allows identical lenses to be produced and then polished to the correct prescription, thereby saving production and distribution costs. Therefore, it would

Art Unit: 2873

have been obvious to one of ordinary skill in the art to make the Jacobsson lens as a semi-finished type, as disclosed by Ace, because it would save production and distribution costs.

23. Claim 86 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobsson in view of Letter et al. (4,217,038). In regard to claim 86, in the Jacobsson method, the deposition step is a vacuum deposition step. However, Jacobsson does not disclose that it is conducted in a box coater or sputter coating apparatus. Letter discloses coating a lens in a sputter coating apparatus (col. 12, lines 41-47). Furthermore, Letter teaches that the sputter coating is desirable because it gives better bonding and better control than other methods (col. 12, lines 41-47). Therefore, it would have been obvious to one of ordinary skill in the art to conduct the deposition of the Jacobsson method in a sputter coating apparatus because it would give good bonding and control, as taught by Letter.

***Allowable Subject Matter***

24. Claims 51, 54, 57, and 81 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

25. The following is a statement of reasons for the indication of allowable subject matter: The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of claims 51, 54, 57, and 81, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper.

The prior art fails to teach a combination of all the features in claim 51. For example, these features include the detailed structure recited in claim 49 and also the limitations that the coating includes alternating layers of silica and niobium metal and an additional niobium oxide and/or silica layer, and that each of the layers has the appropriate thickness to provide a desired color to the optical lens.

The prior art fails to teach a combination of all the features in claim 54. For example, these features include the detailed structure recited in claims 45, 52, and 53 and also the product-by-process limitation that a surface of the optical lens is subjected to a plasma treatment. This limitation requires structural limitations that are not found in Jacobsson.

The prior art fails to teach a combination of all the features in claim 57. For example, these features include the detailed structure recited in claims 45 and 56 and also the limitation that the coating is deposited on the surface bearing the mark, to render the mark substantially invisible from the eye side of the lens. Tovi discloses deposition of a partially reflective coating on the surface bearing the mark. Tovi further discloses that the coating is necessary for a laminated lens in which the mark is invisible from the eye side. However, it is not the deposition of the coating itself that renders the mark invisible from the eye side.

The prior art fails to teach a combination of all the features in claim 81. For example, these features include the detailed structure recited in claims 74, 76, and 79 and the limitations that the visible mark is deposited on the silica top layer and that the visible mark is formed from a laminate adhesive or polymeric material having a refractive index approximately equal to that of the silica layer. Although Daniels et al. (4,619,504) discloses that ink markings applied with a

Art Unit: 2873

stamp are known (col. 1, lines 40-42 and col. 3, lines 8-9), it does not disclose that the ink has a refractive index approximately equal to that of the silica layer.

26. Claims 71 and 72 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action (three problems in each) and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of claims 71 and 72, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper.

The prior art fails to teach a combination of all the features in claim 71. For example, these features include the detailed structure recited in claim 67 and also the limitation that the asymmetric reflectance light absorbing coating is deposited on the concave surface of the back lens wafer. The term "back lens wafer", as understood, requires a front lens wafer, and the term "lens element" is understood to mean "lens component".

The prior art fails to teach a combination of all the features in claim 72. For example, these features include the detailed structure recited in claim 67 and also the limitation that the asymmetric reflectance light absorbing coating is deposited on the convex surface of the front lens wafer. The term "front lens wafer", as understood, requires a back lens wafer, and the term "lens element" is understood to mean "lens component".



Art Unit: 2873

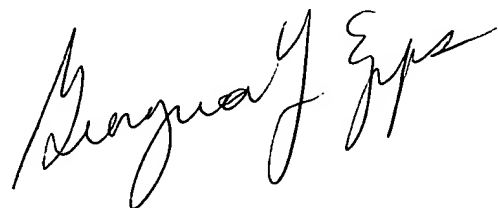
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah A. Raizen whose telephone number is (703) 305-7940. The examiner can normally be reached on Monday-Friday, from 9:30 a.m. to 2:30 p.m. EST (a part-time schedule).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (703) 308-4883. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

dar



Georgia Epps  
Supervisory Patent Examiner  
Technology Center 2800